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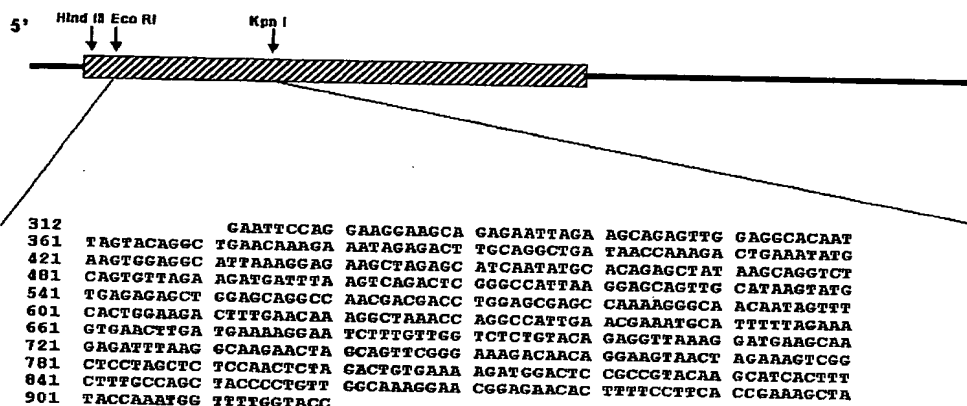
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(57) Abstract: This invention refers to the recombinant human endooligopeptidase (hEOPA), polynucleotide which codes for the hEOPA, polynucleotide which allow the expression of the EOPA in prokaryotes and eukaryotes, including the human beings; use of the synthetic substrates for the determination of the proteolytic activity of the hEOPA, or of its chaperon activity or its activity as soluble peptide receptor; obtaining and using of the specific antibodies and inhibitors of its oligopeptide binding activity, as agonists, competitors and antagonists, which are able to disturb its interaction and the complex formation with other proteins. The invention also refers to the application of the natural and recombinant protein, chemically or genetically modified which aim is the diagnosis and/or the application in congenital, infectious and degenerative pathologic conditions of the central nervous system, and for psychiatric and behavioral dysfunctions. It is also proposed the application of the inhibitors and competitors for the interaction of EOPA with ligands, including antibodies or their derivatives, for the treatment of tissular and neurodegenerative pathologies.